

LEGIONELLOSIS

I. IDENTIFICATION

- A. **CLINICAL DESCRIPTION:** An illness with acute onset, which can take two distinct forms:
- 1) **Legionnaires disease**, which is characterized by fever, cough, myalgia, and pneumonia.
 - 2) **Pontiac fever**, a similar but milder illness without pneumonia.
- B. **REPORTING CRITERIA:** Laboratory confirmation.
- C. **LABORATORY CRITERIA FOR CONFIRMATION:**
- Isolation of *Legionella* species from respiratory secretions, lung tissue, pleural fluid, or other normally sterile fluids, **OR**
 - Demonstration of a fourfold or greater rise in the reciprocal immunofluorescence antibody (IFA) titer to ≥ 128 against *Legionella pneumophila* serogroup 1 between paired acute- and convalescent-phase serum specimens, **OR**
 - Positive Direct Fluorescence Antibody (DFA) test of lower respiratory secretion, pleural fluid or tissue specimen for *Legionella pneumophila* serogroup 1, **OR**
 - Demonstration of *L. pneumophila* serogroup 1 antigens in urine by radioimmunoassay (RIA) or enzyme-linked immunosorbent assay (ELISA).
- D. **KENTUCKY CASE DEFINITION:** A clinically compatible case that is laboratory confirmed.

II. ACTIONS REQUIRED / PREVENTION MEASURES

- A. **KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE REPORTING:**
REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 5 business days of the identification of a case or suspected case.
- B. **EPIDEMIOLOGY REPORTS REQUESTED:**
1. Kentucky Reportable Disease Report Form EPID 200 (Rev. Jan/03).
 2. Legionellosis Case Report (CDC 52.56 Rev. 8/99).
- C. **PUBLIC HEALTH INTERVENTIONS:**
- Attempts to culture the organism from clinical specimens prior to the initiation of antibiotic therapy are strongly encouraged.
 - Source investigation by LHD. The completion of the Legionellosis Case Report Form (CDC 52.56) usually fulfills this requirement for sporadic cases.
 - Outbreaks require a search for potential exposures common to multiple case-patients.

III. CONTACTS FOR CONSULTATION

- A. KENTUCKY DEPARTMENT FOR PUBLIC HEALTH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418
- B. KENTUCKY DEPARTMENT FOR PUBLIC HEALTH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
- C. KENTUCKY DEPARTMENT FOR PUBLIC HEALTH, DIVISION OF EPIDEMIOLOGY AND HEALTH PLANNING: 502-564-7243 or **1-888-973-7678**.

IV. RELATED REFERENCES

- 1. Chin, James, ed. LEGIONELLOSIS. In: Control of Communicable Diseases Manual. 17th ed. Washington, DC: American Public Health Association, 2000: 281-283.
- 2. Pickering, LK, ed. Legionella pneumophila infections. In: 2000 Red Book: Report of the Committee on Infectious Diseases. 25th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2000: 364-365.